



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers  
WASHINGTON, D.C. 20314-1000

REPLY TO  
ATTENTION OF:

CEMP-RT (200-1a)

15 SEP 1995

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Interim Army Policy on Natural Attenuation for  
Environmental Restoration

1. Reference:

Memorandum, DAIM-ED-R, 12 September 1995, SAB (Encl)

2. Army guidance requires mandatory consideration of natural attenuation either alone or in combination with other technologies during the (RI) remedial investigation and (FS) feasibility study phases. Reasons for rejecting natural attenuation must be supported by data and related information.

3. Scopes of work for HTRW contracts should be modified to reflect this new policy.

4. Point of contact is Dr. Donna Kuroda at 202/761-4335

FOR THE DIRECTOR OF MILITARY PROGRAMS:

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CARY JONES  
Chief, Environmental Restoration  
Division  
Directorate of Military Programs

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CEMP-RT (200-1a)

SUBJECT: Interim Army Policy on Natural Attenuation for  
Environmental Restoration

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DEPARTMENT OF THE ARMY  
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REPLY TO  
ATTENTION OF

DAIM-ED-R (200-1c)

12 SEP 1995

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Interim Army Policy on Natural Attenuation for  
Environmental Restoration

1. This memorandum provides interim policy for requiring the consideration of natural attenuation as a remedial action alternative for installation restoration activities under the authorities of Comprehensive Environmental Response, Compensation, and Liability Act Superfund Amendments and authorization Act of 1986, Resource Conservation and Recovery Act, Underground Storage Tanks, National Environmental Policy Act, or relevant State and local regulations. This policy should be implemented immediately for decision documents or Records of Decision resulting from Army's environmental actions.
2. While natural attenuation has no specific regulatory definition, the U.S. Army defines natural attenuation as "the reduction of contaminant concentrations in the environment through biological processes (aerobic and anaerobic biodegradation, plant and animal uptake), physical phenomena (advection, dispersion, dilution, diffusion, volatilization, sorption/desorption), and chemical reactions (ion exchange, complexation, abiotic transformation)." Terms such as "intrinsic remediation" or "bio-transformation" are included within the more general natural attenuation definition.
3. Natural attenuation is not a no-further-action alternative. Natural attenuation typically requires extensive monitoring to ensure that the predicted natural processes are taking place. Natural attenuation remedies might take longer than engineered remedies to correct the problem. Additionally, there should be a readily available contingent remedy for the site. It will take credible scientific data, site characterization data, and predictive modeling to prove that natural processes are sufficient to reduce risk in the time frame required. The Army will need that proof to ensure acceptability of the natural attenuation remedy.

Encl

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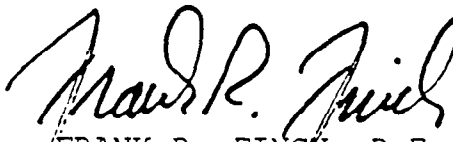
SUBJECT: Interim Army Policy on Natural Attenuation for  
Environmental Restoration

4. The Army is presently not giving full consideration to natural attenuation as a potential remedy for environmental contamination. Therefore, it is Army policy that natural attenuation must be considered as a candidate remedy for contaminated sites either alone or in combination with active engineered measures. An engineered remedial action will not be approved unless data exists to prove that natural attenuation is inappropriate for a site cleanup.

5. Full protocols on the use of natural attenuation for different classes of contaminants commonly found at Army bases are presently under development at the US Army Environmental Center (USAEC). Until these protocols are available, use of the Air Force Center for Environmental Excellence's protocol (Technical Protocol for Implementing the Intrinsic Remediation (Natural Attenuation) with Long-term Monitoring Option for Dissolved-Phase-Fuel Contamination in Ground Water) for petroleum contaminants is recommended. Questions concerning other media/contaminants should be addressed to Mr. Ira May, POC at USAEC, (SFIM-AEC-IRG), Comm (410) 671-1522, DSN 584-1522 or FAX (410) 671-1548.

6. The Office, Director of Environmental Programs POC is Mr. Michael Vogt, (DAIM-ED-R), Comm (703) 693-4635, DSN 223-4635 or FAX (703) 697-0338.

FOR THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT:



FRANK R. FINCH, P.E.  
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Director, Environmental Programs

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